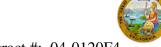
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001768 Address: 333 Burma Road **Date Inspected:** 19-Mar-2008

City: Oakland, CA 94607

OSM Arrival Time: 1830 **Project Name:** SAS Superstructure **OSM Departure Time:** 730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Contractor: **Location:** Shanghai, China

CWI Name: CWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower & OBG

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up, 77M, 89M, 114M, Orthotropic Box Girder (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Bay 1: ZPMC presented ZPMC Notification of witness inspection for magnetic particle testing of final weld. The assembly is identified as deck plate u-rib DP137-001-100. Caltrans QA witnessed ZPMC QC perform magnetic particle (MT) on fillet weld, joining diaphragm plate to u-rib, weld 100. The ZPMC QC inspector is identified as Mr. Zhou Dongyun. Caltrans observed that the QC MT coverage was 100% and performed in conformance with the contract specifications. The following digital picture illustrates ZPMC MT inspection in progress.

OBG Bay 1: Caltrans QA Inspector observed ZPMC removing Production Monitoring Test (PMT) macroetch test samples that were identified by Caltrans QA for removal. The samples were removed using a hand held oxy-fuel cutting torch. These samples are to be then machined, etched and evaluated for conformance with Caltrans Special Provisions. The PMT macroetch samples represent welding that was performed on deck panel DP005-001.

OBG Bay 4: The Caltrans QA Inspector observed ZPMC performing heat straightening operations on diaphragm plates identified as SA276 (N), HSR1 (T) 183 (0), revision 0; 43M BTM SA335 (N)P142, HSR1 (T) 221, revision 0 and 43M Top SA234 (W), HSR1 (T) 207, revision 0. ZPMC was observed heating the plate manually with a rose-bud torch. Caltrans QA observed ZPMC Quality Control (QC) inspector, Mr. Zhao Chen Sun monitoring the

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

heat straightening of the plate using a calibrated infra-red temperature indicating device to monitor the heat.

OBG Bay 1: Caltrans QA Inspector performed visual inspection of the completed submerged arc welding (SAW) cover pass welds; partial joint penetration (PJP) welds joining the closed ribs to deck plate panel DP135-001, u-rib U62, welds 1 & 2; u-rib U63, welds 3 & 4; u-rib U68, welds 5 & 6 and u-rib U58 welds 7 & 8 and u-rib U71, welds 9 & 10. Caltrans QA observed welding overlap, over size welds, underfill and incomplete fusion. These indications observed at the weld were marked in yellow paint stick along the distance from the "Y" axis, starting at the weld start too weld completion end. The weld indications observed were recorded on Caltrans spreadsheet for future reference.

Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Hasler,Mike	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer